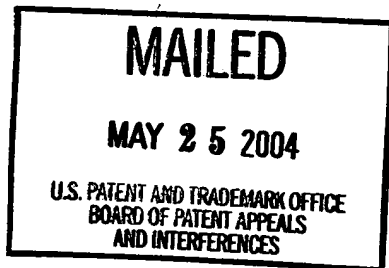The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 29

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRED STEVEN ISOM

Appeal No. 2003-0236
Application 08/905,701

ON BRIEF

Before BARRETT, FLEMING and OWENS, *Administrative Patent Judges.*

OWENS, *Administrative Patent Judge.*

DECISION ON APPEAL

This appeal is from the final rejection of claims 1-25 and 29-41, which are all of the claims pending in the application.

THE INVENTION

The appellant claims a method for sequencing a plurality of tasks performed or controlled by a computer, wherein the sequencing occurs in an at least two-dimensional field having a

1

user-changeable directional attribute. Claim 1 is illustrative:

1.   A method for sequencing a plurality of tasks performed or controlled by a computer, comprising:

a)   placing task objects in an at least two-dimensional directional field having a user-changeable directional attribute, wherein said task objects represent the tasks to be performed by said computer and;

b)   sequencing, by said computer, of one or more of the task objects in the directional field based on the relative spatial location of the task objects in the directional field and the directional attribute of the directional field.

THE REFERENCES

Carlson et al. (Carlson)	5,623,592	Apr. 22, 1997
Keller et al. (Keller)	5,767,852	Jun. 16, 1998
		(filed Jun. 12, 1996)

Dan Ingalls et al. (Ingalls), "Fabrik - A Visual Programming Environment", *OOPSLA '88 Proc.* 176-90 (Sep. 25-30, 1988).

THE REJECTION

Claims 1-25 and 29-41 stand rejected under 35 U.S.C. § 103 as being unpatentable over Carlson in view of Keller and Ingalls.

OPINION

We reverse the aforementioned rejection. We need to address only the independent claims, i.e., claims 1, 14 and 29.

Each of the appellant's independent claims requires placing task objects in an at least two-dimensional field having a user-changeable directional attribute. It is proper to use the

specification to interpret what the appellant means by a word or phrase, such as "at least two-dimensional directional field having a user-changeable directional attribute", in a claim. *See In re Morris*, 127 F.3d 1048, 1053-56, 44 USPQ2d 1023, 1027-30 (Fed. Cir. 1997). The specification indicates that this phrase means that the at least two-dimensional directional field includes a directional attribute that specifies how the order of tasks within the field is determined such that the user does not need to explicitly link one object to another but, rather, links are created dynamically when the sequence is executed (brief, page 4, lines 1-7).

Carlson discloses a method for automatically performing an experiment having one or more series of operations (col. 2, lines 43-45; col. 5, lines 58-60; col. 8, lines 50-53). A user designs the experiment by copying or moving icons from an icon bar (204) into an experimental design region (206) and associating the icons in the experiment design region with each other to form a sequence which reflects the desired experimental flow (col. 6, lines 36-40). The icons include at least one operation icon which specifies the series of operations (col. 2, lines 54-56). The computer executes a series of instructions which generate control signals to at least one external device to

3

cause the at least one external device to perform the series of

operations in a sequence corresponding to the relative positions

of the icons in the sequence of icons (col. 2, lines 49-51, 56-59

and 63-67). A schedule of operations can be built by placing

icons from an icon bar (804) onto a time line (808) in an icon

sequence region (806) of a scheduler window (800) (col. 12,

lines 22-26). The sequence of the icons on the time line

determines the order in which the operations are performed

(col. 12, lines 29-31). A general sequencing rule for the

operations is used, such as from left-to-right, up-to-down or

down-to-up, but sequence control icons can be used to change the

order of the operations (col. 12, lines 58-61; col. 13, lines 1-5

and 33-35).

Keller discloses a method for altering the scheduling

priority of one or more running processes represented by

graphical user interface icons and windows (col. 2, lines 51-53).

A user can drag an icon representing a task to a region of a

priority controller icon (262, 263), which may be a rectangular

strip, one end of which represents low priority and the other end

of which represents high priority, to give the icon the priority

of that region of the priority controller (col. 2, line 59 -

col. 3, line 7; col. 4, lines 28-29). Alternatively, the

4

priority controller regions may be visible or invisible spatially

distinguished regions of the computer screen to which the icons

are dragged (col. 7, lines 6-15).[1]

Ingalls discloses a kit of computational and user interface

components that can be wired together to build new functions

(page 176). Applications can be built by dragging copies of

components from a parts bin into a construction window and

hooking the components together by their connectors (page 177).

The data flow between components can be bidirectional (pages 180-

181).

The examiner argues (answer, page 8):

Ingalls provides a system for changing the directional
flow of execution in a visual programming environment.
The Ingalls reference teaches the concept of
bidirectionality as a means for reversing task order in
an iconic program. This bidirectional data flow
mechanism enables a user to select/change the direction
of operations in a task sequence. Clearly, this user-
changeable bidirectionality feature is functionally
equivalent to the claimed limitation of selecting a
directional attribute for the sequencing of task
objects. Accordingly, the changing execution
direction, or bidirectionality as disclosed by Ingalls
supplies the recited "user-changeable directional
attribute" for reversing program flow in the graphical
task sequencing environment.

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[1] Keller does not indicate that the relative positions of
the regions are user changeable.

The Ingalls reference demonstrates the changing of
execution flow in an iconic programming arrangement.
It clearly evidences the principle of changing the
direction/sequencing of task objects/operations, and it
is this teaching that is relied on in the obviousness
combination set forth supra. The rejection
cites/employs Ingalls to show the practice of altering
the directional flow in an Iconic program. Simply
stated, the changeable-direction aspect of Ingalls
furnishes the system of Carlson with the facility for
reversing the direction of the iconic field.

Ingalls' bidirectional data flow, however, does not meet the

requirement of the appellant's claims for an at least two-

dimensional directional field having a user-changeable

directional attribute. Ingalls merely wires components together

such that there is, for example, left-to-right flow for input on

the left and right-to-left flow for input on the right

(page 180). There is no least two-dimensional directional field

which itself has a user-changeable directional attribute.

Furthermore, the examiner has not explained how the applied

references would have fairly suggested such a field to one of

ordinary skill in the art.

Accordingly, we conclude that the examiner has not carried

the burden of establishing a *prima facie* case of obviousness of

the appellant's claimed invention.

6

DECISION

The rejection of claims 1-25 and 29-41 under 35 U.S.C. § 103 over Carlson in view of Keller and Ingalls is reversed.

REVERSED
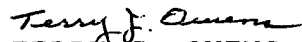

LEE E. BARRETT   )
Administrative Patent Judge   )
)
)

MICHAEL R. FLEMING   ) BOARD OF PATENT
Administrative Patent Judge   )
)   APPEALS AND
) INTERFERENCES

TERRY J. OWENS   )
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7

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Application 08/905,701

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